Watershed Improvement Network Journal

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Information for watershed residents, restorationists, and managers in Humboldt County

Fish and Culverts in a Permitting Tangle

It's a proven fish barrier? Rusted culvert bottom? Has a high potential for failure during a large event? That was easy, found funding to replace it? So let's go! ...Hold up there just a minute, it's actually not so easy. Grab your waders and wire-cutters and we'll work our way through the tangles of the culvert replacement permitting maze.

Helping Fish: Becoming A Prohibitive Venture

Restoration groups, landowners, and local governments on the north coast are finding it's not so elementary to replace problematic culverts. With recent changes due to the coho listing, keeping abreast of the latest process is difficult and expensive. These projects are complicated *before* adding in the layers of permits necessary. Restoration groups and local governments are beginning to ask questions like: At what stage in my project do I involve permitting agencies? How long does it take them to give me a permit? Will I be able to implement my project in the small window of time available or will the permits take too long? What follows are some of the answers to these questions.

Who are the Main Players?

California Department of Fish and Game (DFG). Though it's probably the most established, best understood, generally least frustrating and most helpful of the major permitting processes, there have been some changes of late in the 1601/1603 process. Now, instead of each project fitting under a programmatic CEQA document, they each need environmental clearance. The good news is that projects can be exempt from the CEQA process under certain circumstances, which will be determined by DFG staff after the draft agreement is signed by the applicant.

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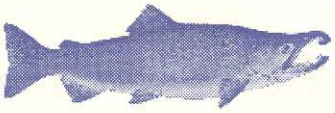
Permits Untangled: The Main Players

Agency	Format	Length of Review Period	When Notification is NOT Necessary	Have Written Guidelines?
California Department of Fish and Game	1601 (public) or 1603 (private) permit: Notification of Lake and Streambed Alteration Agreement, Project Questionnaire, (relevant attachments,) CEQA compliance and fees. Preconsultation available.	DFG will notify within 30 days of application completed if Agreement is required; applicant has 14 days to accept or deny terms.	Always necessary when a project may *"substantially divert or obstruct the natural flow of any river, stream or lake or use any materials from a streambed."*	Yes: 1601/1603 application packet
Humboldt County Building Department	Application includes: plot-plan checklist and relevant project information; $50 fee for pre-project inspection; and an approved 1601/1603 permit, if applicable.	Approximately two to three weeks for County, then ten days for Audubon Society confirmation.	Project is a Principally Permitted Use or Activity in the Streamside Management Area section of the Open Space Element of the County Framework Plan.	Yes and no: plot-plan checklist, but no other details in writing
Corps of Engineers	Section 404 permit pre-application consultation is available; application; project may be eligible for an exemption under any number of nationwide permits.	General permits: one month Individual permits: up to four months (depending on NMFS consultation period) after receipt of formal application.	The Corps has jurisdiction over all U.S. waters including wetlands...no exceptions.	Yes: Section 404 Application form and guidelines
National Marine Fisheries Service	When the project occurs in a stream with endangered salmonids, consultation is mandated by the Endangered Species Act. (No form.)	Currently constrained by number of staff available.	Non fish-bearing streams, unless there is potential downstream impact to salmonid habitat from project-related sediment contribution.	Due out in January

Fish and Culverts...



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Otherwise, if environmental clearance is not accomplished by the project manager, it is carried out by DFG staff (for a fee plus all related costs). This new process takes more time and money, and now involves the State Clearinghouse, but it is generally straightforward with little guesswork. More information on the web: www.dfg.ca.gov/wahcb/1000.html.

Humboldt County Community Development Department. The County is currently working on a new Erosion Control and Grading Ordinance to replace interim resolution on development in Streamside Management Areas (see story on page 3).

A Plot-Plan checklist and relevant project information is required, followed by a $50 fee for a pre-project inspection. If it is determined that the project is a Principally Permitted Use for a Streamside Management Area, no further action is required. If a 1603 is issued for the project, the County will not require a permit. If DFG doesn't require a 1603, the County may require a permit, the fee for which is based on a percentage of the project cost.

Corps of Engineers (COE). Currently, the San Francisco District COE is developing a Regional General Permit (RGP 1) for fish passage improvement projects. It is estimated that this document will be published in January. The RGP 1 will *"authorize the public to renovate existing water crossings to facilitate fish passage and/or reduce sediment entering the aquatic ecosystem and perform stream restoration within three-hundred feet upstream and downstream of crossings."*

RGP 1 application procedures will require such information (other than basic project description) as: analysis of fish passage under existing conditions and a description of how the proposed project will improve fish passage; proposed three-year monitoring and maintenance program to evaluate project effectiveness; detailed sections for engineered structures; and an erosion control plan. The RGP includes up-front NMFS consultation and should speed up the process. Copies of the Draft RGP 1 can be obtained from Michael Lamprecht at the Eureka COE office, 707-443-0855.

In the meantime, a Section 404 permit application is required unless the project is authorized by a non-notification Nationwide Permit (NWP). Many NWPs will be changing in the next few months. Timber and ranch road culverts may be covered by one of many NWPs.

Projects that do not propose a change in culvert design...are exempt from Section 404. Projects that do propose a change...–even if the change will improve stream or habitat conditions–require a Section 404 permit.

One last note about COE permitting: projects that do not propose a change in culvert design and are not within a navigable waterway (Sectin 10) may be exempt from Section 404 or may be covered by a general permit unless listed species are present. Projects that do propose a change in design–even if the change will improve stream or habitat conditions–require a Section 404 permit application.

National Marine Fisheries Service (NMFS). NMFS becomes involved with COE-regulated projects where Pacific salmonids listed under the Endangered Species Act are potentially at risk. The COE must consult with NMFS if the COE determines a project may affect listed salmonid species. NMFS must complete consultation and make a determination whether the project is a take of salmonids–the COE has the discretion to issue a permit based on that conslutation. Project proponents can ask for review and technical assistance from NMFS prior to permitting actions. However, NMFS currently has one engineer dedicated to fish passage design for Coastal California, Jonathan Mann in Santa Rosa–so your request for help should be put in early.

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NMFS is currently requiring that all fish passage projects be designed to allow passage for juvenile and adult salmonids. Project proponents must show biological support for project designs that preclude juvenile passage. NMFS does not consider cost-effectiveness of the project in its assessment.

NMFS has "Community-Based Restoration" matching funds available for fish passage barrier and habitat enhancement projects Requests for proposals are circulated annually. Get more information from local NMFS representative Nan Reck 707-825-5167.

Other Permitting Agencies With Potential Jurisdiction

Cities (some have grading ordinances)
California Regional Water Quality Control Board
California Coastal Commission
U.S. Fish and Wildlife Service

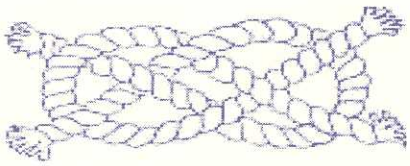
Morrison Gulch: A Case Study

Background

Morrison Gulch, (aka "Cascade Creek"), is an important coho tributary to Jacoby Creek, which flows into Humboldt Bay close to Arcata, California. A five foot corrugated metal pipe is located on a county road 791 feet upstream of the confluence to Jacoby Creek and is a documented fish passage barrier. Surveys conducted by Coastal Stream Restoration Group (CSRG) and DFG confirmed the presence of spawning coho, low densities of juveniles, and suitable spawning and rearing habitat above the culvert .

In November 1997 DFG granted funds to CSRG to design and construct a fish ladder at the culvert outlet. In the meantime a culvert inventory conducted for Humboldt County identified the Morrison Gulch culvert as one of the highest priority fish passage improvement sites on the County road system. Compelling video footage documents numerous unsuccessful access attempts by coho.

Between April 1998 and April 1999 a series of meetings were held with Humboldt County Public Works, Natural Resources Services,



...In a Permitting Tangle

CSRG, and the Humboldt Bay watershed coordinator, Matt Kiesse. A letter regarding the project was sent to NMFS on February 4, 1999. All parties agreed that a fish ladder would not provide the best solution for fish passage. DFG agreed to allow CSRG to use grant funds for data collection and culvert design assistance. NRS, with funds from the Water Quality Control Board 319(h) program, was able to provide a cost share for materials and technical assistance. Mr. Kiesse surveyed the stream profile and cross sections.

Drs. Bill Trush and Terry Roeloffs and their Coastal Stream Management 560 students from Humboldt State University conducted a hydrologic analysis. This analysis proposed several design alternatives to facilitate adult and/or juvenile fish passage. The best final reports were given to the Public Works engineer, who then finalized the design for the culvert.

The Public Works Department, responding to community and agency pressures, endeavored to do what was right. Public Works staff gathered funding for the project from several sources and applied for a 1601 Streamside Alteration Agreement with DFG in July 1999. DFG determined that the project was exempt under CEQA and approved the agreement in September 1999. Public Works installed a stream diversion at the site in early October, and were ready to install the new culvert when they received a "cease-and-desist" order from the Army Corps of Engineers.

At this point the process became tangled. Public Works staff made an earlier determination, based on experience from similar projects, that the project was covered by a nationwide permit, and did not consult the COE. In a letter to Public Works dated October 12, COE states that "Although your project may be covered by a Nationwide authorization, special condition 11 of the nationwide permits, Endangered Species, states that *'No activity is authorized under any nationwide permit which is likely to jeopardize the continued existence of a threatened or endangered species...Non-federal permittees shall notify the District Engineer if any listed species or critical habitat might be affected or is in the vicinity of the project'*." NMFS then became involved and together with COE and Public Works staff, attempted to resolve project design issues.

NMFS requested the project be designed to facilitate juvenile passage and recommended a culvert that more effectively reduced flow velocity. The project, however, was designed for adults with minimal juvenile access, a much less costly and complex venture. In a meeting on November 23, Public Works, COE, NMFS, DFG, and FWS staff discussed design options. The group developed a compromise design that would allow for some juvenile passage and includes upstream grade-control structures, downstream jump-pools and lowering of the culvert elevation 3.5 feet. The Public Works engineer is currently finalizing project design for review by NMFS.

During this November 23 meeting, it was also determined that:

- COE will publish final Regional General Permit for fish passage projects in December;
- NMFS will complete a Biological Opinion on the RGP 1 early in 2000;
- NMFS will publish fish passage/culvert guidelines in January; and
- Public Works, COE, NMFS, DFG, and FWS will initiate a trial coordination process for permitting and design of fish passage projects in January.

Looking Back on1999: Worst (Actual) Scenario

- ☹ COE was not consulted regarding the project, and staff issued a "cease-and-desist" order because they could not authorize a nationwide permit without completing consultation with NMFS due to presence of endangered species.
- ☹ NMFS and Public Works could not come to a timely agreement on project design.
- ☹ Public Works staff are frustrated with the permitting process, but are still willing to initiate more fish passage/culvert replacement projects.
- ☼ DFG smoothly accommodated change in original fish ladder design.
- ☼ New cooperating partnerships were established for fish passage projects between Public Works, regulatory agencies, and restoration groups.
- ☹ Project cooperators frustrated at postponed project and at another season of no fish passage.
- ☹ Time and money diverted to crisis management instead of project implementation. Time and money wasted on initial implementation efforts.
- ☼ Some design and permitting training value gleaned from project.
- ☹ Volunteers and agency staff will take their time to net and transport fish upstream this winter.

Best Case (Potential) Scenario

- ☼ COE/NMFS coordinate an outreach program that ensures those likely to implement culvert replacement projects are aware of the process, timeline and agency needs.
- ☼ When NMFS receives a letter from Public Works in February of 1998, they offer technical design assistance and inform Public Works that the COE needs to be contacted.
- ☼ Public Works contacts COE, and a preapplication consultation meeting with COE and NMFS occurs on site early in the process.
- ☼ Public Works understands and institutionalizes the permitting process for fish passage projects.
- ☼ COE/NMFS are supportive of a Public Works fish passage pilot project and proactively help it through the process. Problems encountered are recorded as information for next time and remedied as much as possible at the time.
- ☼ The outcome is a cooperative working relationship where Public Works is successful and interested in implementing more fish passage projects; a pilot project exists for others to learn from; monitoring at the site is continued, providing much-needed data; and fish are happily spawning upstream.

Improving The Process to Benefit Fish

All parties involved in the Morrison Gulch tangle agree that the permitting process as it stands now is not working for the fish. In a recent interview Department of Commerce Secretary William M. Daley (the agency that directs NMFS) stated "Our goal here is to

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...Permitting Tangle

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restore salmon. But we know that we cannot accomplish that alone. As we have all said repeatedly, extinction is not an option! We want to work together with state and local officials to preserve, for future generations, healthy salmon stocks along with clean and productive rivers and streams."

> ***"We know we cannot accomplish [salmon restoration] alone... We want to work together with state and local officials..."***
>
> **– Department of Commerce Secretary William M. Daley**

Rather than creating a disincentive to do good work for northcoast streams and fisheries, project proponents and regulatory agencies need to work together to make sure permitting processes are effective and user-friendly.

Mark Lancaster, coordinator of the Five Counties' Planning Group for Coho Salmon, is concerned with NMFS' stand on passage of juveniles at every culvert. *"When we are looking at one specific pipe and deciding what's best for fish passage, we need to stand back and look at the overall picture. There are so many passage projects that need to be done and only so much funding to go around. Do we try to get 100% passage at each pipe no matter what the cost, or would it be better for the species for us to make some difficult descisions on where we may have to sacrifice some passage so more sites can be treated."*

It is imperative that these issues are resolved, because Counties will be implementing increasing numbers of fish passage projects in years to come. If each of these future projects are as difficult and time-consumptive as the Morrison Gulch project, NMFS, COE and Public Works staff will be overwhelmed and unable to complete the task in time to save the species.

NMFS, the COE and Public Works staff will be conducting a field tour on January 6, 2000 to look at a number of fish passage barriers and will continue to discuss measures that could help provide incentives for improvement of fish passage.

While researching the fish passage permitting 'tangle', Ruth Blyther, NRS Projects Manager, found that restorationist and land manager permitting "wish lists" include the following:

- Agencies adopt an inventory protocol for culverts with an associated cost-to-benefit ratio analysis (like the road inventory protocols developed by Pacific Watershed Associates);
- Regulatory agencies streamline format and process;
- "One-stop-shop" permitting is developed for projects where one agency is primarily responsible.
- Permit training opportunities are increased; and
- Regulatory agencies improve outreach and education efforts.

It is a timely issue, for the longer we delay development of an accessible, streamlined, clear process for designing and permitting culvert replacement projects, the more seasons fish will suffer denied access to valuable spawning and rearing habitat. ♦

Input Needed on Watershed Fund$

Funding "troubleshooting" is the initial focus of the California Biodiversity Council Watershed Work Group, organized through the California Resouces Agency. Coordinated by Nina Gordon, Special Assistant for Watershed Policy, Planning and Outreach, the Work Group is looking for input on what types of funding are needed and what mechanisms for getting the funds out there are effective.

To date, the Work Group has developed:

- $ Minutes from previous meetings;
- $ Background on formation and mission of the group; and
- $ A matrix describing existing watershed funding–what works, what needs improvement, and recommendations.

Let 'em Know...

Get involved with this funding study! Future meetings around the state, including one on the north coast in the spring, will be publicized to those who express interest. The Work Group will maintain an email list to keep folks in touch with project developments. Input to future out-of-area meetings could be set up in advance via conference calls at regional centers.

Field practitioners, watershed groups, and others with knowledge of and experience with watershed funding programs should contact:

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